Results 1 - 20 of 29

Sort by relevance in expanded form

Save results to a Binder

Result page: **1** 2 next >>

1 Compressing large boolean matrices using reordering techniques

David Johnson, Shankar Krishnan, Jatin Chhugani, Subodh Kumar, Suresh Venkatasubramanian

August 2004 **VLDB '04: Proceedings of the Thirtieth international conference on Very large data bases - Volume 30** , Volume 30

Publisher: VLDB Endowment

Full text available: Pdf (288.67 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 4, Downloads (12 Months): 40, Downloads (Overall): 89, Citation Count: 8

Large boolean matrices are a basic representational unit in a variety of applications, with some notable examples being interactive visualization systems, mining large graph structures, and association rule mining. Designing space and time efficient ...

2 Space Efficient Fast Isosurface Extraction for Large Datasets

Udeepta D. Bordoloi, Han-Wei Shen

October 2003 **VIS '03: Proceedings of the 14th IEEE Visualization 2003 (VIS'03)**

Publisher: IEEE Computer Society

Full text available: Pdf (321.48 KB) Additional Information: full citation, abstract, references, cited by

Bibliometrics: Downloads (6 Weeks): 1, Downloads (12 Months): 24, Downloads (Overall): 163, Citation Count: 5

In this paper, we present a space efficient algorithm for speeding up isosurface extraction. Even though there exist algorithms that can achieve optimal search performance to identify isosurface cells, they prove impractical for large datasets due to ...

Keywords: Isosurface, Compression, Transform Coding, Quantization

3 Compiler-based I/O prefetching for out-of-core applications

Angela Demke Brown, Todd C. Mowry, Orran Krieger

May 2001 **Transactions on Computer Systems (TOCS)** , Volume 19 Issue 2

Publisher: ACM Request Permissions

Full text available: Pdf (499.03 KB) Additional Information: full citation, abstract, references, cited by, index terms, review

Bibliometrics: Downloads (6 Weeks): 8, Downloads (12 Months): 55, Downloads (Overall): 929, Citation Count: 17

Current operating systems offer poor performance when a numeric application's working set does not fit in main memory. As a result, programmers who wish to solve "out-of-core" problems efficiently are typically faced with the onerous task ...

Keywords: compiler optimization, prefetching, virtual memory

4 Contigra: an XML-based architecture for component-oriented 3D applications

Raimund Dachselt, Michael Hinz, Klaus Meißner

February 2002 **Web3D '02:** Proceedings of the seventh international conference on 3D Web technology

Publisher: ACM Request Permissions

Full text available: Pdf (368.21 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 5, Downloads (12 Months): 49, Downloads (Overall): 830, Citation Count: 20

Even though numerous Web3D technologies exist, most of them do not support a high-level, multi-disciplinary authoring process. Moreover, concepts of reuse are rarely provided. A component-based approach is introduced with the CONTIGRA architecture to ...

Keywords: 3D components, 3D user interfaces, 3D widgets, XML schema, component-based development, contigra, extensible 3D (X3D), virtual environments

5 GPGPU: general purpose computation on graphics hardware

David Luebke, Mark Harris, Jens Krüger, Tim Purcell, Naga Govindaraju, Ian Buck, Cliff Woolley, Aaron Lefohn

August 2004 **SIGGRAPH '04:** SIGGRAPH 2004 Course Notes

Publisher: ACM Request Permissions

Full text available: Pdf (63.03 MB) Additional Information: full citation, abstract, cited by

Bibliometrics: Downloads (6 Weeks): 118, Downloads (12 Months): 1305, Downloads (Overall): 7260, Citation Count: 20

The graphics processor (GPU) on today's commodity video cards has evolved into an extremely powerful and flexible processor. The latest graphics architectures provide tremendous memory bandwidth and computational horsepower, with fully programmable vertex ...

6 Abstract state machines capture parallel algorithms

Andreas Blass, Yuri Gurevich

October 2003 **Transactions on Computational Logic (TOCL)** , Volume 4 Issue 4

Publisher: ACM Request Permissions

Full text available: Pdf (610.28 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 8, Downloads (12 Months): 58, Downloads (Overall): 721, Citation Count: 16

We give an axiomatic description of parallel, synchronous algorithms. Our main result is that every such algorithm can be simulated, step for step, by an abstract state machine with a background that provides for multisets.

Keywords: ASM thesis, Parallel algorithm, abstract state machine, postulates for parallel computation

7 Static correlated branch prediction

Cliff Young, Michael D. Smith

September 1999 **Transactions on Programming Languages and Systems (TOPLAS)** , Volume 21 Issue 5

Publisher: ACM Request Permissions

Full text available: Pdf (508.49 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 6, Downloads (12 Months): 65, Downloads (Overall): 580, Citation Count: 7

Recent work in history-based branch prediction uses novel hardware structures to capture branch correlation and increase branch prediction accuracy. Branch correlation occurs when the outcome of a conditional branch can be accurately ...

Keywords: branch correlation, branch prediction, path profiling, profile-driven optimization

8 A software development tool chain for a reconfigurable processor

Alberto La Rosa, Luciano Lavagno, Claudio Passerone

November 2001 **CASES '01:** Proceedings of the 2001 international conference on Compilers, architecture, and synthesis for embedded systems

Publisher: ACM

Full text available: Pdf (79.88 KB) Additional Information: full citation, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 3, Downloads (12 Months): 38, Downloads (Overall): 503, Citation Count: 7

9 Feature matching and deformation for texture synthesis

Qing Wu, Yizhou Yu

August 2004 **SIGGRAPH '04:** SIGGRAPH 2004 Papers

Publisher: ACM Request Permissions

Full text available: Mov (18:47 MIN), Pdf (448.53 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 33, Downloads (12 Months): 213, Downloads (Overall): 895, Citation Count: 33

One significant problem in patch-based texture synthesis is the presence of broken features at the boundary of adjacent patches. The reason is that optimization schemes for patch merging may fail when neighborhood search cannot find satisfactory candidates ...

Keywords: Distance Transforms, Image Registration, Oriented Features, Texture Warping

Also published in:

August 2004 **Transactions on Graphics (TOG)** Volume 23 Issue 3

10 The Value Evolution Graph and its Use in Memory Reference Analysis

Silvius Rus, Dongmin Zhang, Lawrence Rauchwerger

September 2004 **PACT '04:** Proceedings of the 13th International Conference on Parallel Architectures and Compilation Techniques

Publisher: IEEE Computer Society

Full text available: Pdf (230.44 KB) Additional Information: full citation, abstract, cited by

Bibliometrics: Downloads (6 Weeks): 4, Downloads (12 Months): 12, Downloads (Overall): 90, Citation Count: 3

We introduce a framework for the analysis of memory reference sets addressed by induction variables without closed forms. This framework relies on a new data structure, the value evolution graph(VEG), which models the global flow of values taken by induction ...

11 A Frequency-Sensitive Point Hierarchy for Images and Volumes

Tomihisa Welsh, Klaus Mueller

October 2003 **VIS '03:** Proceedings of the 14th IEEE Visualization 2003 (VIS'03)

Publisher: IEEE Computer Society

Full text available: Pdf (699.19 KB) Additional Information: full citation, abstract, references, cited by

Bibliometrics: Downloads (6 Weeks): 0, Downloads (12 Months): 29, Downloads (Overall): 147, Citation Count: 3

This paper introduces a method for converting an image or volume sampled on a regular grid into a space-efficient irregular point hierarchy. The conversion process retains the original frequency characteristics of the dataset by matching the spatial ...

Keywords: volume rendering, point-based rendering, splatting

12 Model-driven development of Web applications: the AutoWeb system

Piero Fraternali, Paolo Paolini

October 2000 **Transactions on Information Systems (TOIS)** , Volume 18 Issue 4

Publisher: ACM Request Permissions

Full text available: Pdf (6.94 MB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 18, Downloads (12 Months): 284, Downloads (Overall): 4855, Citation Count: 27

This paper describes a methodology for the development of WWW applications and a tool environment specifically tailored for the methodology. The methodology and the development environment are based upon models and techniques already used in the hypermedia, ...

Keywords: HTML, WWW, application, development, intranet, modeling

13 Space-time points: 4d splatting on efficient grids

Neophytos Neophytou, Klaus Mueller

October 2002 **VVS '02:** Proceedings of the 2002 IEEE symposium on Volume visualization and graphics

Publisher: IEEE Press

Full text available: Pdf (1.48 MB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 3, Downloads (12 Months): 49, Downloads (Overall): 416, Citation Count: 5

4D datasets, such as time-varying datasets, usually come on 4D Cartesian Cubic (CC) grids. In this paper, we explore the use of 4D Body Centered Cubic (BCC) grids to provide a more efficient sampling lattice. We use this lattice in conjunction with a ...

14 High-level synthesis of distributed logic-memory architectures

Chao Huang, Srivaths Ravi, Anand Raghunathan, Niraj K. Jha

November 2002 **ICCAD '02:** Proceedings of the 2002 IEEE/ACM international conference on Computer-aided design

Publisher: ACM

Full text available: Pdf (1.10 MB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 2, Downloads (12 Months): 23, Downloads (Overall): 262, Citation Count: 5

With the increasing cost of global communication on-chip, high-performance designs for data-intensive applications require architectures that distribute hardware resources (computing logic, memories, interconnect, *etc.*) throughout a chip, while ...

15 Optimizing multiple dimensional queries simultaneously in multidimensional databases

Weifa Liang, Maria E. Orlowska, Jeffrey X. Yu

February 2000 **The VLDB Journal — The International Journal on Very Large Data Bases** , Volume 8 Issue 3-4

Publisher: Springer-Verlag New York, Inc.

Full text available: Pdf (269.57 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 2, Downloads (12 Months): 26, Downloads (Overall): 448, Citation Count: 2

Some significant progress related to multidimensional data analysis has been achieved in the past few years, including the design of fast algorithms for computing datacubes, selecting some precomputed group-bys to materialize, and designing efficient ...

Keywords: Data warehousing, MDDBs, Multiple dimensional query optimization, OLAP, Query modeling

16 Point-based computer graphics

Marc Alexa, Markus Gross, Mark Pauly, Hanspeter Pfister, Marc Stamminger, Matthias Zwicker

August 2004 **SIGGRAPH '04 : SIGGRAPH 2004 Course Notes**

Publisher: ACM Request Permissions

Full text available: Pdf (6.94 MB) Additional Information: full citation, abstract, cited by

Bibliometrics: Downloads (6 Weeks): 39, Downloads (12 Months): 361, Downloads (Overall): 2692, Citation Count: 7

This course introduces points as a powerful and versatile graphics primitive. Speakers present their latest concepts for the acquisition, representation, modeling, processing, and rendering of point sampled geometry along with applications and research ...

17 Scalable feature selection, classification and signature generation for organizing large text databases into hierarchical topic taxonomies

Soumen Chakrabarti, Byron Dom, Rakesh Agrawal, Prabhakar Raghavan

August 1998 **The VLDB Journal — The International Journal on Very Large Data Bases** , Volume 7 Issue 3

Publisher: Springer-Verlag New York, Inc.

Full text available: Pdf (281.37 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 11, Downloads (12 Months): 65, Downloads (Overall): 845, Citation Count: 43

We explore how to organize large text databases hierarchically by topic to aid better searching, browsing and filtering. Many corpora, such as internet directories, digital libraries, and patent databases are manually organized into topic hierarchies, ...

18 Terrain database interoperability issues in training with distributed interactive simulation

Guy A. Schiavone, S. Sureshchandran, Kenneth C. Hardis

July 1997 **Transactions on Modeling and Computer Simulation (TOMACS)** , Volume 7 Issue 3

Publisher: ACM Request Permissions

Full text available: Pdf (443.34 KB) Additional Information: full citation, abstract, references, cited by, index terms, review

Bibliometrics: Downloads (6 Weeks): 6, Downloads (12 Months): 75, Downloads (Overall): 807, Citation Count: 1

In Distributed Interactive Simulation (DIS), each participating node is responsible for maintaining its own model of the synthetic environment. Problems may arise if significant inconsistencies are allowed to exist between these separate world views, ...

Keywords: distributed interactive simulation, terrain databases

19 Biclustering Algorithms for Biological Data Analysis: A Survey

Sara C. Madeira, Arlindo L. Oliveira

January 2004 Issue 1 **IEEE/ ACM Transactions on Computational Biology and Bioinformatics (TCBB)** , Volume 1

Publisher: IEEE Computer Society Press

Full text available: Pdf (1.28 MB) Additional Information: full citation, references, cited by

Bibliometrics: Downloads (6 Weeks): 17, Downloads (12 Months): 219, Downloads (Overall): 2106, Citation Count: 101

Keywords: Biclustering, simultaneous clustering, coclustering, subspace clustering, bidimensional clustering, direct clustering, block clustering, two-way clustering, two-mode clustering, two-sided clustering, microarray data analysis, biological data analysis, gene expression data.

20 Facial modeling and animation

Jörg Haber, Demetri Terzopoulos

August 2004 **SIGGRAPH '04:** SIGGRAPH 2004 Course Notes

Publisher: ACM Request Permissions

Full text available: Pdf (18.15 MB) Additional Information: full citation, abstract

Bibliometrics: Downloads (6 Weeks): 77, Downloads (12 Months): 725, Downloads (Overall): 5383, Citation Count: 0

In this course we present an overview of the concepts and current techniques in facial modeling and animation. We introduce this research area by its history and applications. As a necessary prerequisite for facial modeling, data acquisition is discussed ...

Result page: **1** 2 next >>